

Assessment of Non-native Plants in Florida's Natural Areas

assessment.ifas.ufl.edu

Assessment date 31 March 2015

	Jasminum dichotomumGold coast jasmine NORTH Zone	Answer	Score
1.01	Is the species highly domesticated?	n	0
1.02	Has the species become naturalised where grown?		
1.03	Does the species have weedy races?		
2.01	Species suited to Florida's USDA climate zones (0-low; 1-intermediate; 2-high) North Zone: suited to Zones 8, 9 Central Zone: suited to Zones 9, 10 South Zone: suited to Zone 10	1	
2.02	Quality of climate match data (0-low; 1-intermediate; 2-high)	1	
2.03	Broad climate suitability (environmental versatility)	У	1
2.04	Native or naturalized in habitats with periodic inundation North Zone: mean annual precipitation 50-70 inches Central Zone: mean annual precipitation 40-60 inches South Zone: mean annual precipitation 40-60 inches	У	1
2.05	Does the species have a history of repeated introductions outside its natural range?	У	
3.01	Naturalized beyond native range	У	2
3.02	Garden/amenity/disturbance weed	n	0
3.03	Weed of agriculture	n	0
3.04	Environmental weed	n	0
3.05	Congeneric weed	У	2
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	unk	0
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	n	-1
4.05	Toxic to animals	n	0
4.06	Host for recognised pests and pathogens	n	0
4.07	Causes allergies or is otherwise toxic to humans	unk	0
4.08	Creates a fire hazard in natural ecosystems	unk	0
4.09	Is a shade tolerant plant at some stage of its life cycle	unk	0
4.10	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils). North & Central Zones: infertile soils; South Zone: shallow limerock or Histisols.	unk	0
4.11	Climbing or smothering growth habit	У	1
4.12	Forms dense thickets	n	0
5.01	Aquatic	n	0
5.02	Grass	n	0
5.03	Nitrogen fixing woody plant	n	0
5.04	Geophyte	n	0
6.01	Evidence of substantial reproductive failure in native habitat	n	0
6.02	Produces viable seed	У	1

	Risk Assessment Results	— Eva	luate —
	Implemented Pacific Second Screening	у	es
	Total Score		4
8.05			
8.04	Tolerates, or benefits from, mutilation or cultivation		
8.03	Well controlled by herbicides	У	-1
8.02	Evidence that a persistent propagule bank is formed (>1 yr)		
8.01	Prolific seed production		
7.08	Propagules dispersed by other animals (internally)	?	
7.07	Propagules dispersed by other animals (externally)	n	-1
7.06	Propagules bird dispersed	У	1
7.05	Propagules water dispersed u		-1
7.04	Propagules adapted to wind dispersal	n	-1
7.03	Propagules likely to disperse as a produce contaminant	n	-1
7.02	Propagules dispersed intentionally by people	У	1
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	У	1
6.07	Minimum generative time (years)		
6.06	Reproduction by vegetative propagation		
5.05	Requires specialist pollinators		0
5.04	Self-compatible or apomictic	n	-1
5.03	Hybridizes naturally		

section	# questions answered	satisfy minimum?
Α	•	11 yes
В		7 yes
С		15 yes
total		33 yes



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	sminum dichotomumGold coast jasmine CENTRAL/SOUTH Zone	Answer	Score
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2.01	Species suited to Florida's USDA climate zones (0-low; 1-intermediate; 2-high) North Zone: suited to Zones 8, 9 Central Zone: suited to Zones 9, 10 South Zone: suited to Zone 10	2	
2.02	Quality of climate match data (0-low; 1-intermediate; 2-high)	2	
2.03	Broad climate suitability (environmental versatility)	У	1
2.04	Native or naturalized in habitats with periodic inundation North Zone: mean annual precipitation 50-70 inches Central Zone: mean annual precipitation 40-60 inches South Zone: mean annual precipitation 40-60 inches	у	1
2.05	Does the species have a history of repeated introductions outside its natural range?	У	
3.01	Naturalized beyond native range	У	2
3.02	Garden/amenity/disturbance weed	n	0
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4.06	Host for recognised pests and pathogens	n	0
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4.08	Creates a fire hazard in natural ecosystems	unk	0
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4.10	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils). North & Central Zones: infertile soils; South Zone: shallow limerock or Histisols.	unk	0
4.11	Climbing or smothering growth habit	У	1
4.12	Forms dense thickets	n	0
5.01	Aquatic	n	0
5.02	Grass	n	0
5.03	Nitrogen fixing woody plant	n	0
5.04	Geophyte	n	0
6.01	Evidence of substantial reproductive failure in native habitat	n	0
6.02	Produces viable seed	У	1

6.04	Self-compatible or apomictic	n	-1
6.05	Requires specialist pollinators		0
6.06	Reproduction by vegetative propagation		
6.07	Minimum generative time (years)		
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	У	1
7.02	Propagules dispersed intentionally by people	У	1
7.03	Propagules likely to disperse as a produce contaminant	n	-1
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7.05	Propagules water dispersed	unk	-1
7.06	Propagules bird dispersed	У	1
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally) ?		
8.01	Prolific seed production		
8.02	Evidence that a persistent propagule bank is formed (>1 yr)		
8.03	Well controlled by herbicides	У	-1
8.04	Tolerates, or benefits from, mutilation or cultivation		
8.05			
	Total Score		4
	Implemented Pacific Second Screening	у	es
	Risk Assessment Results	Evo	luate —

section		satisfy
	# questions answered	minimum?
Α		11 yes
В		7 yes
С		15 yes
total		33 yes

	Reference	Source data
1.01		cultivated, but no evidence of selection for reduced weediness
1.02		
1.03		
2.01	1. PERAL NAPPFAST Global Plant Hardiness (http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global	
	%20zones/10- year%20climate/PLANT HARDINESS 10YR%20lgnd.tif). 2. Global	13. 3. Native range AFRICA Northeast Tropical Africa: Ethiopia: Sudan
	Biodiversity Information Facility (www.GBIF.org [accessed	East Tropical Africa: Kenya; Tanzania; Uganda
	3/25/2015]) 3. USDA, ARS, National Genetic Resources Program.	West-Central Tropical Africa: Burundi; Cameroon; Central African
	Germplasm Resources Information Network - (GRIN) [Online	Republic; Congo; Rwanda; Zaire
	Database]. National Germplasm Resources Laboratory, Beltsville,	West Tropical Africa: Benin; Ghana; Guinea; Guinea-Bissau;
	Maryland. http://www.ars-grin.gov/cgi-	Liberia; Mali; Nigeria; Senegal; Sierra Leone; Togo
	bin/npgs/html/taxon.pl?409896 (27 March 2015). 4. Home	South Tropical Africa: Angola; Malawi; Zambia 4. Gardening
	Guides, SF Gate "Jasmine vine varieties"	website indicates J. dichotomum suitable for USDA zones 9-11 5.
	(http://homeguides.sfgate.com/jasmine-vine-varieties-	Tolerate temperatures to Zone 10
	41028.html [accessed 27 Mar 2015]). 5. Hortopedia	
2.02	(http://en.hortopedia.com accessed 3/27/2015)	N=1, C=2, S=2
	Köppen-Geiger climate map (http://www.hydrol-earth-syst-	1. Native range in Africa falls in Af, Am, Aw
2.03	sci.net/11/1633/2007/hess-11-1633-2007.pdf).	1. Native range in Africa fails in Ar, Afri, Aw
2.04	Global Biodiversity Information Facility (www.GBIF.org	1.Multiple simulations indicate native range falls within 1200 and
	[accessed 3/25/2015]) 2. NOAA Analysis of African Precipitation	2200 mm annual precipitation (47-87 inches)
	and Surface Temperature.	
	(http://www.esrl.noaa.gov/psd/people/brant.liebmann/data/afri	
	ca-echam5/africa-echam5.html accessed 30 March 2015)	
2.05	, ,	1. Introduced to Puerto Rico in 1942. 2. Present in Panama.
	PR. Pp 1-72.2. Flora of Mesoamericana (linked by Tropicos:	ornamental (various sources).
	http://www.tropicos.org/Name/23000151?projectid=3 accessed	
	30 March 2015). 3. Woodson and Schery (1976) Flora of Panama.	
	Ann Missouri Bot Gard 63:553-418.	
3.01	1. Flowers of India	Observed to escape cultivation and become wild in parts of
	(http://www.flowersofindia.net/catalog/slides/Rose%20Bud%20J	India. Flowering: January-April.
	asmine.html accessed 30 Mar 2015).	
3.02		No evidence
3.03		No evidence
3.04		No evidence
3.05	1. Home et al. (1991) A Geographic Atlas of World Weeds.	1. Jasminum azoricum, fruticans both listed as present as a weed
	Krieger Publishing Co, Malabar FL. 2. Weeds of Australia,	in Dominicum Republic and Turkey respecitvely. J. azoricum and
	Queensland Govt.	subtriplinerve listed as common weeds in Puerto Rico and
	(http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-	Taiwan respecitively. 2. "asminum polyanthum) is regarded as an
	490a-8d04-	environmental weed in New South Wales, and as a "sleeper
	0605030c0f01/media/Html/Jasminum_polyanthum.htm	weed" in other parts of Australia. This species has escaped
	accessed 30 March 2015).	cultivation as a garden ornamental. It climbs rapidly into the tree
		canopy and covers vegetation at all levels, blocking light and
		restricting the growth and regeneration of native species. Its
		weight may also bring down trees and it is a potentially a serious
		weed of rainforests and riparian areas."

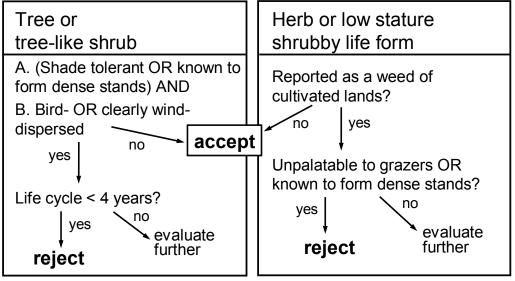
4.01	1. Flora of Panama via Tropicos	These structures do not appear in any description of this species
	(http://www.tropicos.org/Name/23000151 accessed 30 March	
	2015) 2. Flora Zambesiaca via Kew	
	(http://apps.kew.org/efloras/namedetail.do?qry=namelist&flora	
	=fz&taxon=5503&nameid=13722 30 March 2015) 3. JSTor	
4.02		No Evidence
4.03	1. USDA, ARS, National Genetic Resources Program. Germplasm	Not a parasitic family: 1. Family: Oleaceae
	Resources Information Network - (GRIN) [Online Database].	
	National Germplasm Resources Laboratory, Beltsville, Maryland.	
	http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896 (27	
	March 2015).	
4.04	1. Oddoye et al. On-farm introduction of some dry season	1. In a survey of cattle farmers in the Accra Plains of Ghana, many
	feeding strategies to cattle farmers on the Accra Plains of Ghana	were aware that their cattle fed on certain browse species
	and the response of cattle to these strategies. 1. a survey on	including J. dichotomum during the dry season. 2. Bushbuck
	reasons for non-adoption of strategies. Ghana J Agric Sci 35:69-	observed feeding on 43 plant species in Queen Elizabeth National
	78. 2. Apio and Wronski (2005) Foraging behaviour and diet	Park, western Uganda including Jasminum dichotomum.
	composition of bushbuck (tragelaphus scriptus Pallas, 1766) in	, , , , , , , , , , , , , , , , , , ,
	Queen Elizabeth National Park, western Uganda. African J Ecol	
	43:225-232.	
4.05		No evidence (see source data 4.04)
4.06	1. Hortopedia (http://en.hortopedia.com accessed 3/27/2015)	No indication that species is host for significant crop pests or
100	11. Hortopedia (http://en.hortopedia.com/accessed/s/27/2015)	pathogens. Some evidence they are hosts for aphids and mealy
		bugs
4.07		No evidence
4.07		No evidence
4.08	1. Hortopedia (http://en.hortopedia.com accessed 3/27/2015)	No evidence of shade tolerance: 1. Plants prefer a sunny to half-
4.09	11. Hortopedia (http://en.hortopedia.com/accessed/3/27/2013)	shade, in summer they prefer protection from mid-day sun.
4.10	NRCS Global Soil Regions Map	N=?, C=?, S=?: 1. Distribution in native range falls in soil regions
4.10	1. NRCS Global Soil Regions Map (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/?cid	
	=nrcs142p2_054013 accessed 30 Mar 2015).	Allisois, inceptisois, Oxisois, Ottisois.
4.11		1. Scrambling climbing shrub reaching 8m or more 2. Described
4.11	2. Herbiguide (http://www.herbiguide.com.au accessed	as a rampant woody climbing vine.
		as a rampant woody climbing vine.
4.12	3/27/2015)	No evidence
5.01		Not an aquatic plant. Grows in terrestrial habitats.
	1 LICDA ADC National Constitution Description Description	Family: Oleaceae
5.02		Family: Oleaceae
	Resources Information Network - (GRIN) [Online Database].	
	National Germplasm Resources Laboratory, Beltsville, Maryland.	
	http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896 (27	
F 63	March 2015).	No avidance
5.03	ISTOR Clobal Plants (http://wlants.istor.com/s/2/20045)	No evidence
5.04	JSTOR Global Plants (http://plants.jstor.org accessed 3/26/2015)	Not described as a geophyte
6.01	1. Yilangai et al. (2015) Effect of time of day, weather parameters	, ,
	and fruit stage on insect visitors of Carissa edulis and Jasminum	Fruits observed January to August in a related study
	dichotomum in a protected Nigerian habitat. J Env Sci Tox Food	
	Tech 9:23-27.2. Yilangai et al (2014) Avian utilization of the fruits	
	of Carissa edulis and Jasminum dichotomum in a central Nigerian	
	reserve. J Nat Sci Resear 4: 5-10.	
6.02	JSTOR Global Plants (http://plants.jstor.org accessed	1. Fruits lobed, elliptic 1 cm long 2. propagation listed as seed.
	3/26/2015). 2. Pacific Island Ecosystems at Risk	
	(www.hear.org/pier/ accessed 30 mar 2015).	
6.03		No evidence of hybridization outside of horticulture
6.04		No evidence

6.05	Efloraofindia (http://sites.google.com/site/efloraofindia accessed 27 Mar 2015)	bee pollinated and possibly hummingbird pollinted.
6.06	1. Herbiguide (http://www.herbiguide.com.au accessed 3/27/2015) 2. Mather J for Environment B·O·P "Plant pest control climbing plants" Fact sheet PP1700 (http://www.rnzih.org.nz/pages/PP1700.pdf accessed 31 Mar 2015)	Roots form at stem nodes 2. Congener Jasminum polyanthum occasionally spreads via stem fragments
6.07		no evidence found
7.01	1. Herbiguide (http://www.herbiguide.com.au accessed 3/27/2015) 2. Mather J for Environment B·O·P "Plant pest control climbing plants" Fact sheet PP1700 (http://www.rnzih.org.nz/pages/PP1700.pdf accessed 31 Mar 2015)	Genus level information "Most spread is by garden refuse disposal or intentional planting." 2. Congener Jasminum polyanthum occasionally spreads via stem fragments
7.02	1. Hortopedia (http://en.hortopedia.com accessed 3/27/2015)	1. planted as an ornamental
7.03		No evidence
7.04	1. Kew Seed Information Database (http://data.kew.org accessed 27 Mar 2015)	No morphological features facilitating dispersal by wind.
7.05		No evidence
7.06	1. Yilangai et al (2014) Avian utilization of the fruits of Carissa edulis and Jasminum dichotomum in a central Nigerian reserve. J Nat Sci Resear 4: 5-10. 2. Efloraofindia (http://sites.google.com/site/efloraofindia accessed 27 Mar 2015)	1. In a Central Nigerian Reserve, Many bird species utilize the fruits of J. dichotomum including the common bulbul, speckled mousebird, and villiage weaver. Birds disperse seeds through reserve. 2.sets copius amount of seed that local birds eat and disperse.
7.07	1. Kew Seed Information Database (http://data.kew.org accessed 27 Mar 2015)	No description indicating structures for attachment (seed appendages: NO)
7.08	1. Herbiguide (http://www.herbiguide.com.au accessed 3/27/2015) 2. Yilangai et al (2014) Avian utilization of the fruits of Carissa edulis and Jasminum dichotomum in a central Nigerian reserve. J Nat Sci Resear 4: 5-10. 2. Efloraofindia (http://sites.google.com/site/efloraofindia accessed 27 Mar 2015)	1. Genus level information: "Seed is spread by birds and seed eating mammals." 2. Although in a study in a Central Nigerian
8.01	·	No data found on seed production
8.02		No data found on seed bank
8.03	Florida Natural Areas Inventory (http://fnai.org/Invasives/Jasminum_dichotomum_FNAI.pdf accessed 27 Mar 2015) 2. Kline and Duquesnel (1996) Management of invasive exotic plants with herbicides in Florida.	1. Chemical: cut-stump (50% triclopyr amine or 10% triclopyr ester, IFAS), basal bark (10% triclopyr ester, IFAS), foliar (5% glyphosate, IFAS). Note: Retreatment often necessary, best if runners are pulled
	Down To Earth.	back to main stem and then cut. 2. Effectiveness of herbicide treatments (basal and cut surface characterized as "excellent")
8.04		No evidence
8.05		No evidence

Jasminum dichotomum

Pacific second screening: decision rules for species with WRA scores between 1 and 6

(from Daehler et al. 2004)



Vines must pass both tests

This species passes the herb side of the SS.

This species forms dense thickets and is bird dispersed but there is no information regarding minimum generative time. Therefore the results of the SS is 'Evaluate'